```
=> d his

     (FILE 'HOME' ENTERED AT 15:01:36 ON 26 JAN 2005)

     FILE 'CAPLUS' ENTERED AT 15:01:58 ON 26 JAN 2005
L1         97460 S CORTICOSTEROID OR CORTICOSTERONE OR DEXAMETHASONE OR PREDNISO
L2        198853 S NICOTINE OR CANNABINOID OR AMPHETAMINE OR COCAINE OR CRACK OR
L3           589 S L1(S)L2
L4           463 S L3 NOT PY>=2001
L5            19 S PREDNISOLONE(S)L2

     FILE 'MEDLINE, BIOSIS, EMBASE, SCISEARCH' ENTERED AT 16:05:44 ON 26 JAN
     2005
L6            52 S L5
L7            41 S L6 NOT PY>=2000
L8            26 DUP REM L7 (15 DUPLICATES REMOVED)
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=> s corticosteroid or corticosterone or dexamethasone or prednisolone or prednisone or
prednylidene or triamcinolone or betamethasone paramethasone or fluorocortolone or deflazacort
or cloprednol or fludrocortisone
         20543 CORTICOSTEROID
         41723 CORTICOSTEROIDS
         47347 CORTICOSTEROID
                 (CORTICOSTEROID OR CORTICOSTEROIDS)
         24963 CORTICOSTERONE
           163 CORTICOSTERONES
         25026 CORTICOSTERONE
                 (CORTICOSTERONE OR CORTICOSTERONES)
         30935 DEXAMETHASONE
            17 DEXAMETHASONES
         30936 DEXAMETHASONE
                 (DEXAMETHASONE OR DEXAMETHASONES)
         10330 PREDNISOLONE
            93 PREDNISOLONES
         10368 PREDNISOLONE
                 (PREDNISOLONE OR PREDNISOLONES)
          5735 PREDNISONE
            16 PREDNISONES
          5736 PREDNISONE
                 (PREDNISONE OR PREDNISONES)
            40 PREDNYLIDENE
          3668 TRIAMCINOLONE
             9 TRIAMCINOLONES
          3670 TRIAMCINOLONE
                 (TRIAMCINOLONE OR TRIAMCINOLONES)
          2879 BETAMETHASONE
             4 BETAMETHASONES
          2879 BETAMETHASONE
                 (BETAMETHASONE OR BETAMETHASONES)
           190 PARAMETHASONE
             1 PARAMETHASONES
           191 PARAMETHASONE
                 (PARAMETHASONE OR PARAMETHASONES)
             2 BETAMETHASONE PARAMETHASONE
                 (BETAMETHASONE(W)PARAMETHASONE)
            11 FLUOROCORTOLONE
           184 DEFLAZACORT
            44 CLOPREDNOL
           364 FLUDROCORTISONE
L1       97460 CORTICOSTEROID OR CORTICOSTERONE OR DEXAMETHASONE OR PREDNISOLON
               E OR PREDNISONE OR PREDNYLIDENE OR TRIAMCINOLONE OR BETAMETHASON
               E PARAMETHASONE OR FLUOROCORTOLONE OR DEFLAZACORT OR CLOPREDNOL
               OR FLUDROCORTISONE

=> s nicotine or cannabinoid or amphetamine or cocaine or crack or mdma or ecstasy
         26218 NICOTINE
            75 NICOTINES
         26226 NICOTINE
                 (NICOTINE OR NICOTINES)
          5237 CANNABINOID
          4161 CANNABINOIDS
          6089 CANNABINOID
                 (CANNABINOID OR CANNABINOIDS)
         17883 AMPHETAMINE
          1666 AMPHETAMINES
         18356 AMPHETAMINE
                 (AMPHETAMINE OR AMPHETAMINES)
         18659 COCAINE
            45 COCAINES
         18664 COCAINE
                 (COCAINE OR COCAINES)
        100494 CRACK
         55582 CRACKS
        133228 CRACK
```

```
                (CRACK OR CRACKS)
          1301 MDMA
             1 MDMAS
          1301 MDMA
                (MDMA OR MDMAS)
           702 ECSTASY
L2      198853 NICOTINE OR CANNABINOID OR AMPHETAMINE OR COCAINE OR CRACK OR
               MDMA OR ECSTASY

=> s l1(s)l2
L3         589 L1(S)L2

=> s l3 not py>=2001
       4204004 PY>=2001
L4         463 L3 NOT PY>=2001
```

TITLE: The role of **corticosteroids** in **nicotine**'s physiological and behavioral effects

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LANGUAGE: English

AB This paper reviews evidence indicating that adrenal **corticosteroids** modulate the responsiveness of mice and rats to **nicotine**. Adrenalectomy increases, and both acute and chronic **corticosteroid** administration decrease, some of the physiol. and behavioral effects of **nicotine**. One function of adrenal steroids may be to regulate stress-induced changes in nicotine sensitivity. Another is to mediate the development of chronic tolerance when nicotine is given intermittently, and when the resulting tolerance has a learned component. A role of glucocorticoids in the development of tolerance to **nicotine** is suggested by the findings that a conditioned elevation of plasma **corticosterone**, which anticipates **nicotine** delivery, accompanies the development of chronic tolerance and that environmental cues evoke a conditioned **corticosterone** response, but only after they have become associated with **nicotine** delivery. The mechanisms by which adrenal steroids modulate nicotine sensitivity are not known, although recent in vitro evidence suggests that steroids can rapidly and reversibly reduce nicotinic receptor function. While most of the data are consistent with the hypothesis that **corticosteroids** reduce **nicotine** responsiveness, and thus promote a learned form of tolerance, there are new findings that **corticosteroids** increase the development of sensitization to the locomotor-activating effects of **nicotine**. These data suggest that formulations postulating a unidirectional effect of **corticosteroids** on **nicotine**'s actions (e.g. decreased sensitivity) must be revised to take into account interacting variables such as the specific **nicotine** effect being studied and whether that effect normally exhibits tolerance or sensitization. Finally, research is presented which indicates that the **corticosterone**-elevating effects of **nicotine**, previously reported for experimenter-administered drug, are also produced when **nicotine** administration is contingent on an operant response, and at a dose which sustains the development of **nicotine** self-administration in rats. These findings highlight the feasibility of using self-administration models in future explorations of the relationship between adrenal steroids and nicotine function.

REFERENCE COUNT: 87 THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT